

# MINERAL INDUSTRY SURVEYS

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Iron Ore, Monthly

## IRON ORE IN MAY 1996

U.S. mine production of iron ore in May was 17.3% higher than that of April, according to the U.S. Geological Survey. Shipments increased by 13.5% and mine stocks decreased by 5.9%. Consumption and trade data for May will be included in a subsequent report.

### Oglebay Norton Leaves Iron Ore

Oglebay Norton Co. announced that it has reached an agreement in principle to sell its interest in Eveleth Mines to a new entity to be owned by the other current owners of Eveleth Mines. This follows an earlier announcement that Oglebay Norton would not extend its management contract with Eveleth Mines, but intended to retain its ownership position (See IRON ORE IN MARCH 1996). This brings to an end 143 years of involvement with the iron ore industry; Oglebay Norton has managed Eveleth since 1965. The sale includes a cash payment of \$5 million to Oglebay Norton, although other terms of the transaction have yet to be completed. The purchasers will assume certain liabilities of Oglebay Norton and its affiliates arising from their ownership, operation and management of Eveleth Mines. Eveleth Tacoma Co. and Eveleth Expansion Co., co-

owners of Eveleth Mines, will be dissolved and a new entity formed. The transition is expected to be completed by the end of the third quarter of 1996. (Oglebay Norton Co. News Release, June 20, 1996 and personal communication)

### South African COREX-MIDREX Project to Begin Soon

Preliminary civil work has begun at Saldanha Bay, South Africa, on a 1.25 million metric ton per year (Mt/yr) steel production complex that will include COREX and MIDREX plants for the production of feed materials. A consortium consisting of Voest-Alpine Industrieanlagenbau GmbH (VAI), Austria; Linde AG, Germany; and Midrex Direct Reduction Corp., United States; was awarded the contract to construct a 804,000 metric ton per year (t/yr) direct reduction plant. Late last year, Saldanha Steel commissioned VAI to build a \$189 million 650,000 t/yr COREX C-2000 hot metal plant to be completed by the end of 1988.

The facility will be similar to the COREX-MIDREX project under construction for

Hanbo Steel in Asan Bay, South Korea. The MIDREX module at Saldanha Steel will use COREX export gas to produce direct reduced iron (DRI). The steelworks, which has been described as an integrated compact mill, will be built adjacent to the Sishen iron ore port facilities at Saldanha Bay, and will use hot metal, DRI and scrap as feed. Feed for the COREX and MIDREX plants will be lump ore from Sishen iron mine, owned and operated by ISCOR Ltd. (Metal Bulletin, April 18, 1996, No. 8071, page 27; Direct From Midrex, 2nd Quarter, 1996, page 11; and personal communication)

### Hamersley Planning New Mine

Hamersley Iron Pty. Ltd. expects to begin development of a new iron mine at Yandicoogina, in the Pilbara region of Western Australia. This mine will be close to the Yandi Mine, owned by BHP Iron Ore Pty. Ltd. If construction proceeds, Hamersley would raise production to about 10 Mt/yr over a 2-year period. (Metal Bulletin, May 16, 1996, No. 8089, page 23)

TABLE 1  
U.S. PRODUCTION AND SHIPMENTS OF IRON ORE, BY DISTRICTS 1/  
(Exclusive of ore containing 5% or more manganese)

(Thousand metric tons)

Period	Lake Superior		Other U.S.		Total 2/	
	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
Production						
1995:						
May	5,543	24,289	20	187	5,563	24,474
June	5,395	29,684	16	203	5,411	29,885
July	5,672	35,356	21	224	5,693	35,578
August	5,666	41,022	26	250	5,691	41,269
September	5,382	46,404	49	299	5,431	46,700
October	5,542	51,946	23	322	5,565	52,265
November	5,089	57,035	57	379	5,146	57,411
December	4,991	62,026	48	427	5,039	62,450
1996:						
January	4,232	4,232	35	35	4,267	4,267
February	4,217	8,449	25	60	4,242	8,509
March	4,801	13,250	23	83	4,824	13,333
April	4,668	17,918	22	105	4,690	18,023
May	5,479	23,397	20	125	5,500	23,522
Shipments						
1995:						
May	6,279	19,871	45	201	6,325	20,073
June	5,346	25,217	28	229	5,374	25,447
July	5,837	31,054	29	258	5,867	31,314
August	6,463	37,517	26	285	6,489	37,803
September	5,963	43,480	30	315	5,993	43,796
October	5,754	49,234	37	352	5,791	49,587
November	5,632	54,866	44	396	5,676	55,263
December	5,596	60,462	39	435	5,635	60,898
1996:						
January	3,363	3,363	12	12	3,375	3,375
February	1,315	4,678	21	33	1,336	4,711
March	2,357	7,035	25	58	2,382	7,093
April	5,290	12,325	20	78	5,310	12,403
May	6,003	18,328	21	99	6,024	18,427

1/ Excludes byproduct ore.

2/ Data may not add to totals shown because of independent rounding.

TABLE 2  
U.S. PRODUCTION, SHIPMENTS AND STOCKS OF IRON ORE IN MAY 1/  
(Exclusive of ore containing 5% or more manganese)

(Thousand metric tons)

District	Production		Shipments 2/		Stocks 3/	
	1996	1995 4/	1996	1995 4/	1996	1995 4/
Lake Superior:						
Michigan	1,304	1,200	1,746	1,361	2,228	1,790
Minnesota	4,176	4,342	4,257	4,918	7,239	5,301
Other U.S.	20	20	21	45	116	91
Total 5/	5,500	5,563	6,024	6,325	9,583	7,182

1/ Excludes byproduct ore.

2/ Includes rail and vessel.

3/ Includes mines, plants and loading docks.

4/ Data was previously published as rounded numbers.

5/ Data may not add to totals shown because of independent rounding.

TABLE 3  
CANADA: SHIPMENTS OF IRON ORE

(Thousand dry metric tons)

Period	Newfoundland	Quebec	Ontario	British Columbia	Total 1/
1995:					
May	2,545	1,866	106	6	4,523
June	2,027	966	106	7	3,106
July	2,417	1,212	131	8	3,767
August	2,551	1,160	117	8	3,836
September	2,150	1,331	52	6	3,539
October	1,985	1,435	50	7	3,476
November	1,823	1,314	55	7	3,199
December	1,442	1,473	83	6	3,004
Year total	19,969	14,121	1,020	83	35,193
1996:					
January	477	686	42	7	1,212
February	646	927	46	7	1,626
March	444	743	49	7	1,242
April	2,075	741	36	7	2,858
May	NA	NA	NA	NA	NA

NA Not available.

1/ Data may not add to totals shown because of independent rounding.

Source: Natural Resources Canada.

TABLE 4  
CONSUMPTION AND STOCKS OF IRON ORE AND AGGLOMERATES AND  
BLAST FURNACE PRODUCTION OF HOT METAL AT U.S. IRON AND STEEL PLANTS

(Thousand metric tons)

Consumption of ores and agglomerates				
Consumption by source	April		Year to date	
	1996	1995 1/	1996	1995 1/
United States ores	4,272	4,782	18,628	20,075
Canadian ores	609	811	2,763	2,961
Foreign ores	768	735	2,791	2,517
Total 2/	5,649	6,327	24,183	25,552
Consumption by process				
Blast furnaces	5,120	5,782	21,806	23,504
Steel furnaces	7	5	24	21
Agglomerating plants 3/	522	540	2,315	2,027
Miscellaneous 4/	1	1	3	1
Total 2/	5,649	6,327	24,183	25,552
Stocks of ores and agglomerates				
Storage point	April 30			
	1996	1995		
Furnace yards	8,864	8,684		
Receiving/transfer docks	1,221	1,666		
Total consumer	10,085	10,350		
Blast furnace production of hot metal				
	April		Year to date	
	1996	1995	1996	1995
Hot metal and pig iron produced in blast furnaces	4,019	4,140	16,850	17,017
No. of blast furnaces operating on the last day of the month	38	39	XX	XX

XX Not applicable.

1/ Data was previously published as rounded numbers.

2/ Data may not add to totals shown because of independent rounding.

3/ Iron ore and iron ore concentrates consumed in agglomerating plants not located at the mine site.

4/ Sold to nonreporting companies or used for purposes not listed.

Sources: American Iron Ore Association (consumption of iron ore) and American Iron and Steel Institute (production of hot metal and pig iron).

TABLE 5  
U.S. EXPORTS OF IRON ORE AND AGGLOMERATES, BY COUNTRY  
OF DESTINATION AND TYPE

(Thousand metric tons)

Country of destination and type	1995		1996		
	3rd Quarter	4th Quarter	1st Quarter	March	April
Canada	1,569	1,257	833	326	158
Mexico	(1/)	(1/)	5	1	1
Other	1	(1/)	1	1	1
Total 2/	1,570	1,257	840	328	159
Pellets	1,511	1,225	833	326	157
Other	59	32	7	1	3
Total 2/	1,570	1,257	840	328	159

1/ Less than 1/2 unit.

2/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE AND AGGLOMERATES,  
BY COUNTRY AND TYPE  
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	April 1996		Year to date 1996			Year to date 1995 2/ (thousand metric tons)
	Thousand metric tons	Value 1/ (thousand dollars)	Thousand metric tons	Value 1/ (thousand dollars)	Value 1/ (dollars per ton)	
Australia	--	--	249	1,680	6.75	201
Bahamas, The	62	1,394	62	1,394	22.48	--
Brazil	414	10,365	1,430	34,536	24.15	993
Canada	886	29,077	1,554	51,203	32.95	1,216
Chile	--	--	39	589	15.10	--
Finland	--	--	3	154	51.33	6
Indonesia	--	--	--	--	--	(3/)
Mauritania	--	--	133	2,322	17.46	179
Mexico	--	--	(3/)	8	20.40	--
Peru	--	--	43	451	10.49	45
Spain	11	181	11	181	16.45	--
Trinidad and Tobago	--	--	--	--	--	5
United Kingdom	--	--	--	--	--	1
Uruguay	24	591	24	591	24.63	--
Venezuela	273	9,893	900	33,144	36.83	723
Total 4/	1,669	51,500	4,450	126,252	28.37 5/	3,368
Concentrates	81	1,308	82	1,345	16.40	134
Coarse ores	40	1,393	332	11,656	35.11	593
Fine ores	327	6,460	1,418	22,717	16.02	1,074
Pellets	1,087	38,925	2,458	86,260	35.09	1,429
Briquettes	--	--	--	--	--	--
Other agglomerates	133	3,415	157	4,112	26.19	132
Roasted pyrites	--	--	3	164	54.67	6
Total 4/	1,669	51,500	4,450	126,252	28.37 5/	3,368

1/ Customs value. Excludes international freight, insurance, and other c.i.f. charges. Unit values shown are calculated from unrounded data.

2/ Data was previously published as rounded numbers.

3/ Less than 1/2 unit.

4/ Data may not add to totals shown because of independent rounding.

5/ Weighted average calculated from unrounded data by dividing total value by total tonnage.

Source: Bureau of the Census.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE AND AGGLOMERATES IN APRIL 1996  
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Country of origin	Type of product						Total 1/
	Concentrates	Coarse ores	Fine ores	Pellets	Briquettes and other agglomerates	Roasted pyrites	
Bahamas, The	--	--	62	--	--	--	62
Brazil	28	--	206	135	45	--	414
Canada	54	--	--	768	64	--	886
Spain	--	--	11	--	--	--	11
Uruguay	--	--	--	--	24	--	24
Venezuela	--	40	48	185	--	--	273
Total 1/	81	40	327	1,087	133	--	1,669

1/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY

Country of origin	April 1996		Year to date 1996			Year to date 1995 (thousand metric tons)
	Thousand metric tons	Value 1/ (thousand dollars)	Thousand metric tons	Value 1/ (thousand dollars)	Value 1/ (dollars per ton)	
Brazil	135	4,795	502	17,054	33.97	128
Canada	768	27,005	1,436	49,092	34.19	1,045
Peru	--	--	--	--	--	36
Venezuela	185	7,126	520	20,114	38.68	220
Total 2/	1,087	38,925	2,458	86,260	35.09 3/	1,429

1/ Customs value. Excludes international freight, insurance, and other c.i.f. charges. Unit values shown are calculated from unrounded data.

2/ Data may not add to totals shown because of independent rounding.

3/ Weighted average calculated from unrounded data by dividing total value by total tonnage.

Source: Bureau of the Census.

TABLE 9  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE AND AGGLOMERATES, BY CUSTOMS DISTRICT  
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Customs district	April	Year to date	
	1996	1996	1995
Baltimore, MD (13)	263	1,239	873
Buffalo, NY (09)	--	(1/)	--
Charleston, SC (16)	93	138	170
Chicago, IL (39)	132	205	371
Cleveland, OH (41)	115	115	80
Detroit, MI (38)	278	278	1
Duluth, MN (36)	--	51	--
Houston - Galveston, TX (53)	--	21	--
Los Angeles, CA (27)	--	(1/)	(1/)
Mobile, AL (19)	334	1,047	916
New Orleans, LA (20)	195	695	479
Nogales, AZ (26)	--	(1/)	--
Ogdensburg, NY (07)	(1/)	(1/)	--
Philadelphia, PA (11)	248	648	464
Portland, ME (01)	--	(1/)	--
San Diego, CA (25)	--	--	9
San Juan, PR (49)	11	11	5
Total 2/	1,669	4,450	3,368

1/ Less than 1/2 unit.

2/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

TABLE 10  
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY CUSTOMS DISTRICT

(Thousand metric tons)

Customs district	April	Year to date	
	1996	1996	1995
Baltimore, MD (13)	129	372	192
Charleston, SC (16)	23	46	67
Chicago, IL (39)	76	149	237
Cleveland, OH (41)	90	90	80
Detroit, MI (38)	278	278	(1/)
Duluth, MN (36)	--	51	--
Houston - Galveston, TX (53)	--	13	--
Mobile, AL (19)	294	715	464
New Orleans, LA (20)	74	287	36
Philadelphia, PA (11)	122	457	353
Total 2/	1,087	2,458	1,429

1/ Less than 1/2 unit.

2/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.